

PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

RTIP ID# <i>(required)</i> RIV091208				
TCWG Consideration Date November 2011				
Project Description <i>(clearly describe project)</i> <p>The proposed project would install a new traffic signal at the intersection of Jackson Street and Dillon Avenue/Market Street. The proposed project would also install a wireless interconnection among this new traffic signal and two adjacent existing traffic signals at the Jackson Street intersections with Avenue 44 and Avenue 45. The length of the corridor is approximately one mile long along Jackson Street. The proposed project is located in the City of Indio, California (attached two figures, Figure 1-1 and Figure 1-2, show the regional context and location map of the proposed project).</p> <p>The proposed project would not increase roadway capacity and would not alter the local transportation system. The proposed project would not require the acquisition of new right-of-way and would not require construction easements or utility relocations along Jackson Street.</p>				
Type of Project <i>(use Table 1 on instruction sheet)</i>				
Intersection Signalization				
County Riverside	Narrative Location/Route & Post miles Intersection of Jackson Street and Dillon Avenue/Market Street in the City of Indio in Riverside County, California. Caltrans Projects – EA # or Federal Project # FPN CML 5275 (022)			
Lead Agency: Caltrans District 8				
Contact Person Tom Rafferty, P.E. City of Indio	Phone# (760) 391-4017 Ext. 4270	Fax# (760) 342-6590	Email trafferty@indio.org	
Hot Spot Pollutant of Concern <i>(check one or both)</i> PM2.5 PM10 X				
Federal Action for which Project-Level PM Conformity is Needed <i>(check appropriate box)</i>				
<input checked="" type="checkbox"/> Categorical Exclusion (NEPA)	<input type="checkbox"/> EA or Draft EIS	<input type="checkbox"/> FONSI or Final EIS	<input type="checkbox"/> PS&E or Construction	<input type="checkbox"/> Other
Scheduled Date of Federal Action: Dec 2011				
NEPA Delegation – Project Type <i>(check appropriate box)</i>				
<input type="checkbox"/> Exempt	<input checked="" type="checkbox"/> X Section 6004 – Categorical Exemption		<input type="checkbox"/> Section 6005 – Non-Categorical Exemption	
Current Programming Dates <i>(as appropriate)</i>				
	PE/Environmental	ENG	ROW	CON
Start	NA	NA	NA	2011
End	NA	NA	NA	2012

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*

The purpose of the project is to improve traffic safety at the intersection of Jackson Street and Dillon Avenue/Market Street by installing a new traffic signal. Signal synchronization of the proposed project would also improve the traffic flow and would be beneficial for motorists traveling along Jackson Street.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

The vicinity of the proposed project consists of light commercial lands. The northwest corner of the intersection of Jackson Street and Dillon Avenue/Market Street is currently vacant. A DMV facility is at the northeast corner of the subject intersection. Retail stores are located at the southeast and southwest corners of the subject intersection.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

2012 No Build, Jackson Street, LOS = A, ADT = 16,005, Truck ADT = 640 (4%)

2012 Build, Jackson Street, LOS = A, ADT = 16,005, Truck ADT = 640 (4%)

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

2035 No Build, Jackson Street, LOS = C, ADT = 26,000, Truck ADT = 1,040 (4%)

2035 Build, Jackson Street, LOS = C, ADT = 26,000, Truck ADT = 1,040 (4%)

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross street AADT, % and # trucks, truck AADT

2012 No Build, Dillon Avenue/Market Street, LOS = A, ADT = 3,920, Truck ADT = 235 (6%)

2012 Build, Dillon Avenue/Market Street, LOS = A, ADT = 3,920, Truck ADT = 235 (6%)

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross street AADT, % and # trucks, truck AADT

2035 No Build, Dillon Avenue/Market Street, LOS = A, ADT = 6,370, Truck ADT = 380 (6%)

2035 Build, Dillon Avenue/Market Street, LOS = A, ADT = 6,370, Truck ADT = 380 (6%)

Note: The traffic volumes on Dillon Avenue are higher than those on Market Street; therefore, the traffic volumes on Dillon Avenue are used in the analysis.

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*

See attached

Comments/Explanation/Details *(attach additional sheets as necessary)*

See attached

PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

(Attachment)

PM10 Analysis

The proposed project is located the Coachella Valley, a nonattainment area for the federal PM10 standard. The Environmental Protection Agency (EPA) defines five types of projects that are considered to be a Project of Air Quality Concern (POAQC). A PM hot spot analysis is required for a POAQC that is located in a nonattainment or maintenance area for the federal PM10 or PM2.5 standard. Table 1 provides comparison of the proposed project with the EPA's definition of a POAQC.

Table 1

	EPA Definition of a POAQC	Proposed Project
1	New or expanded highway projects that have a significant number of or significant increase in diesel vehicles (defined as greater than 125,000 Annual Average Daily Traffic (AADT) and 8% or more of such AADT is diesel truck traffic)	The proposed project is not a new or expanded highway project. The proposed project is an intersection signalization project that would not increase the capacity of Jackson Street, Market Street, and Dillon Avenue. This type of project improves intersection operations and safety by reducing traffic congestion and improving turning movements. Based on the traffic study (Kimley-Horn and Associates, Inc., 2011), the proposed project would not increase traffic volumes and would not exceed the 125,000 average daily traffic trips threshold for a POAQC. The truck percentage at the project area would be 6% or less, which would be less than the 8% threshold for a POAQC.
2	Projects affecting intersections that are at a Level of Service D, E, F, with a significant number of diesel vehicles, or that that will change to Level of Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project	The proposed project does not affect intersections that are at LOS D, E, or F with a significant number of diesel vehicles. The purpose of the project is to improve traffic turning movements at the intersection of Jackson Street and Dillon Avenue/Market Street by installing a new traffic signal. Signal synchronization of the proposed project would also improve the traffic flow along Jackson Street. Table 2 presents the intersection operation analysis results derived from the traffic study by Kimley-Horn and Associates, Inc. (2011). As show in Table 2, each of the intersections would operate at an acceptable LOS during existing (2011), opening year (2012), and horizon year (2035) conditions with the proposed project.
3	New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location	The proposed project is not a new bus and rail terminal and transfer point project.
4	Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location	The proposed project is not an expanded bus and rail terminal and transfer point project.
5	Projects in or affecting locations, areas, or categories of sites which are identified in the PM2.5 or PM10 implementation plan or implementation plan submission, as appropriate, as sites of possible violation.	The project is not in a location that is identified as a site of possible PM10 violation.

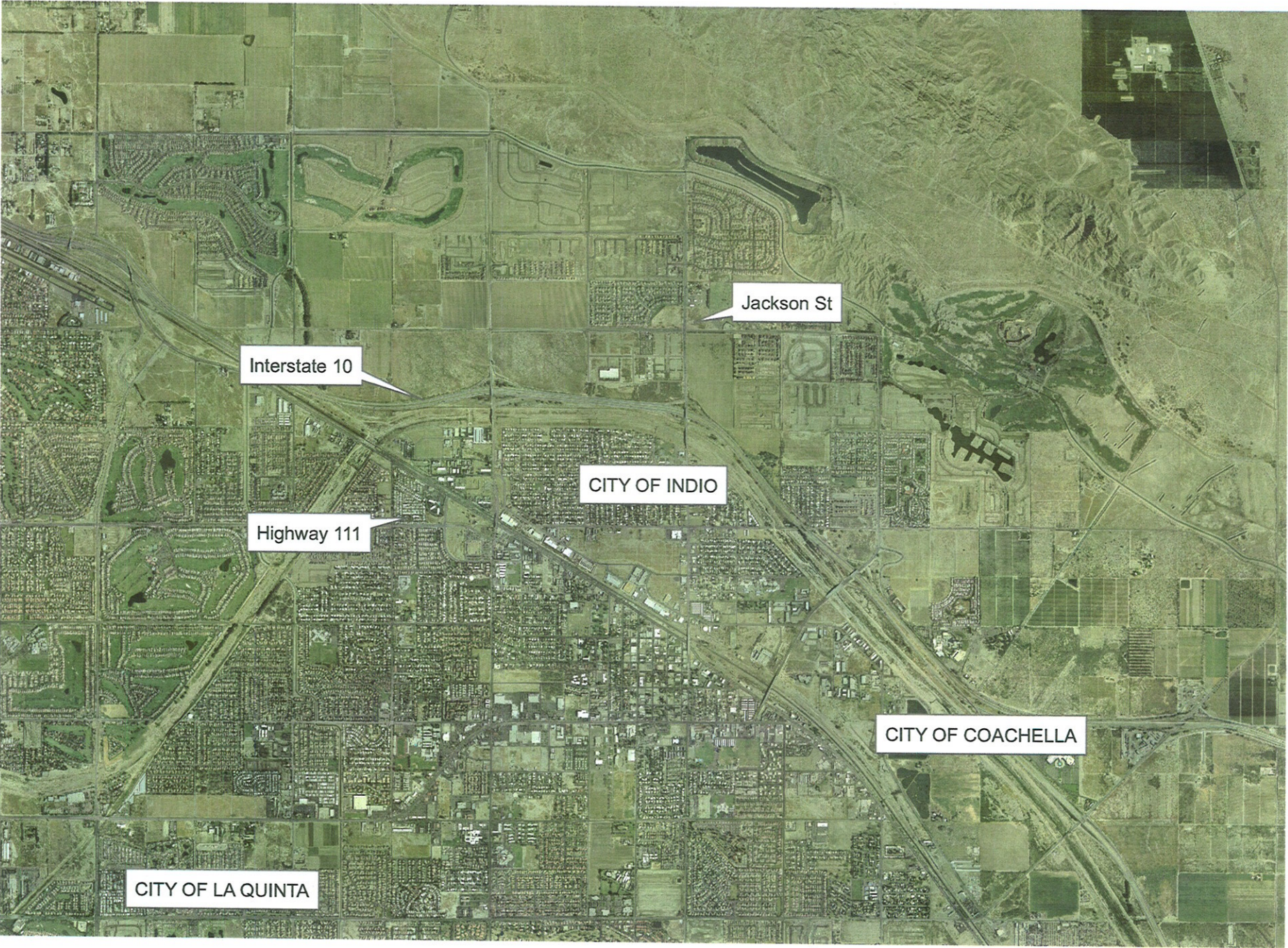
Table 2 Intersection Operation Analysis Results

INTERSECTION		PEAK	EXISTING (2011)		EXISTING WITH PROJECT			
			DELAY (a)	LOS (b)	DELAY (a)	LOS (b)	Δ (d)	IMPACT?
Ave 44 & Jackson St		AM	8.4	A	13.6	B	5.3	NO
		PM	10.4	B	13.0	B	2.6	NO
Dillon Ave/ Market St & Jackson St (c)		AM	20.9	C	14.3	B	-6.6	NO
		PM	89.7	F	19.9	B	-69.8	NO
Ave 45 & Jackson St		AM	14.6	B	14.5	B	-0.1	NO
		PM	11.5	B	10.6	B	-0.9	NO
INTERSECTION		PEAK	2012 BASELINE		2012 WITH PROJECT			
			DELAY (a)	LOS (b)	DELAY (a)	LOS (b)	Δ (d)	IMPACT?
1	Ave 44 & Jackson St	AM	8.5	A	13.5	B	5.0	NO
		PM	10.7	B	12.9	B	2.2	NO
2	Dillon Ave/ Market St & Jackson St (c)	AM	22.5	C	14.2	B	-8.3	NO
		PM	97.2	F	20.4	C	-76.8	NO
3	Ave 45 & Jackson St	AM	14.5	B	14.4	B	-0.1	NO
		PM	11.6	B	10.7	B	-0.9	NO
INTERSECTION		PEAK	2035 BASELINE		2035 WITH PROJECT			
			DELAY (a)	LOS (b)	DELAY (a)	LOS (b)	Δ (d)	IMPACT?
1	Ave 44 & Jackson St	AM	12.3	B	14.6	B	2.3	NO
		PM	56.5	E	53.4	D	-3.1	NO
2	Dillon Ave/ Market St & Jackson St (c)	AM	167.4	F	17.7	B	-149.7	NO
		PM	447.9	F	32.4	C	-415.5	NO
3	Ave 45 & Jackson St	AM	19.3	B	22.0	C	2.7	NO
		PM	16.8	B	16.0	B	-0.8	NO
Notes: (Source: Traffic Study by Kimley-Horn and Associates, Inc. 2011) Bold values indicate intersections operating at LOS E or F. (a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. (b) LOS calculations are based on the methodology outlined in the <i>2000 Highway Capacity Manual</i> and performed using Synchro 7.0 (c) Synchro and HCM methodology are not capable of analyzing the intersection geometrics that exist at this intersection when it is an all-way stop controlled intersection. The results shown for Baseline Conditions are worse than what is expected to occur, as the analysis must assume fewer lanes than are actually available. For the With Project Conditions, the intersection is signalized and can analyze the actual intersection geometrics. (d) Change in delay due to addition of project. Project consists of signalizing the intersection of Market St/Dillon Ave & Jackson St, as well as implementing coordination of the three study intersections								

The comparison of the proposed project with the EPA's definition of a POAQC shows that the proposed project is not a POAQC; therefore a PM hot-spot analysis is not required.

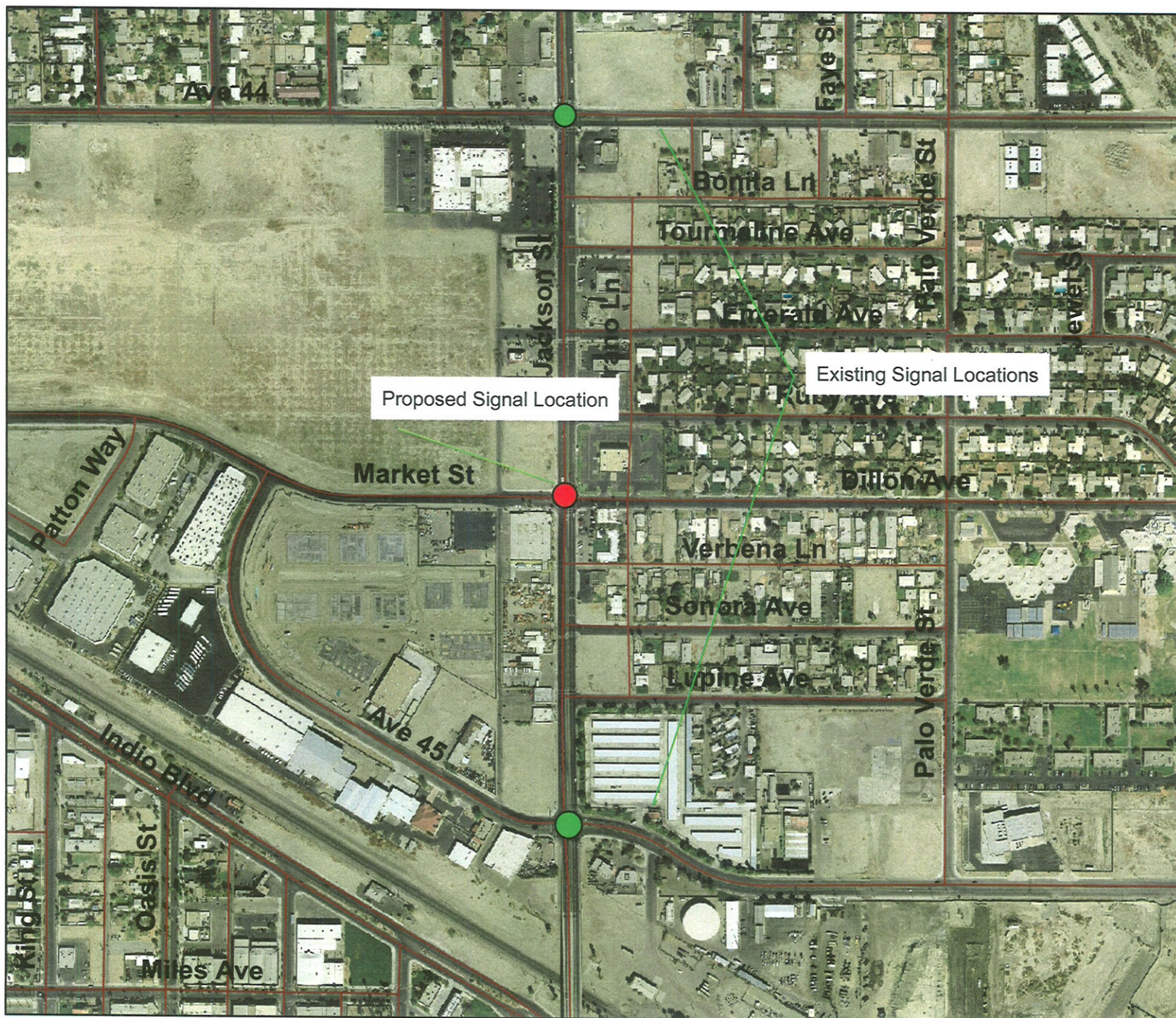
Figure 1-1

CITY OF INDIO
VICINITY MAP
JACKSON STREET TRAFFIC SIGNAL INTERCONNECT & INSTALLATION



CITY OF INDIO
LOCATION MAP
JACKSON ST TRAFFIC SIGNAL INTERCONNECT AND INSTALLATION

Figure 1-2



2008 RTIP

ProjectID	County	Air Basin		RTP ID	Program	Route	Begin	End	System	Conformity Category	Amend	
RIV050503	Riverside	SSAB		RIV050503	NCR30				L	EXEMPT	0	
PTC							304	Agency	INDIO			
CVAG PM-10 PROGRAM PHASE 5: IN ITHE CITY OF INDIO - PAVE EXISTING CITY OWNED DIRT PARKING LOT AT NORTHWEST CORNER OF DR. CARREON BLVD AND BRISTOL ST												
Fund	ENG	R/W	CON	Total	Prior	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	Total
CMAQ	54		215	269	54	215						269
CITY FUNDS	7		28	35	7	28						35
RIV050503 Total	61		243	304	61	243						304
ProjectID	County	Air Basin		RTP ID	Program	Route	Begin	End	System	Conformity Category	Amend	
RIV050504	Riverside	SSAB		RIV050504	NCR30				L	EXEMPT	0	
PTC							175	Agency	INDIO			
CVAG PM-10 PROGRAM PHASE 5: IN THE CITY OF INDIO - PAVE EXISTING CITY OWNED DIRT PARKING LOT AT SOUTHWEST CORNER OF MILES AVE AND KING ST												
Fund	ENG	R/W	CON	Total	Prior	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	Total
CMAQ	31		124	155	31	124						155
CITY FUNDS	4		16	20	4	16						20
RIV050504 Total	35		140	175	35	140						175
ProjectID	County	Air Basin		RTP ID	Program	Route	Begin	End	System	Conformity Category	Amend	
RIV071238	Riverside	SSAB		30M0701	NCNH2				L	EXEMPT	2	
PTC							992	Agency	INDIO			
IN THE CITY OF INDIO - AVE 48 TRAFFIC SIGNAL INTERCONNECT & TRAFFIC SIGNAL INSTALLATION: INSTALL TWO NEW TRAFFIC SIGNALS AT THE INTERSECTIONS OF AVENUE 48/SHIELD ROAD AND AT AVENUE 48/ARABIA STREET, AND INTERCONNECT 7 EXISTING TRAFFIC SIGNALS AND THE 2 NEW TRAFFIC SIGNALS ON AVE 48 BTWN JEFFERSON AND CALHOUN ST.												
Fund	ENG	R/W	CON	Total	Prior	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	Total
CMAQ			790	790		790						790
CITY FUNDS	100		102	202		202						202
RIV071238 Total	100		892	992		992						992
ProjectID	County	Air Basin		RTP ID	Program	Route	Begin	End	System	Conformity Category	Amend	
RIV071239	Riverside	SSAB		30M0701	VEN03				L	EXEMPT	33	
PTC							270	Agency	INDIO			
IN THE CITY OF INDIO - CLEAN VEHICLE ACQUISITION PROGRAM: REPLACE 1997 DIESEL STREET SWEEPER WITH CNG SWEEPER.												
Fund	ENG	R/W	CON	Total	Prior	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	Total
CMAQ			233	233			233					233
CITY FUNDS	5		32	37			37					37
RIV071239 Total	5		265	270			270					270
ProjectID	County	Air Basin		RTP ID	Program	Route	Begin	End	System	Conformity Category	Amend	
RIV091208	Riverside	SSAB		REG0703	ITS02				L	NON-EXEMPT	28	
PTC							410	Agency	INDIO			
IN COACHELLA VALLEY IN THE CITY OF INDIO - JACKSON ST TRAFFIC SIGNAL INTERCONNECT AND TRAFFIC SIGNAL INSTALL: INSTALL A NEW TS AT JACKSON ST & MARKET ST/DILLON AVE., & INSTALL. OF A WIRELESS INTERCONNECT SYSTEM ON JACKSON ST BTWN AVE. 44 TO THE NO. & AVE. 45 TO THE SO., A DISTANCE OF APROX. 1 MILE. INTERCONNECT SYSTEM INCLUDES 2 EXIST. TS & 1 NEW TS.												
Fund	ENG	R/W	CON	Total	Prior	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	Total
CMAQ			332	332			332					332
CITY FUNDS	35		43	78			78					78